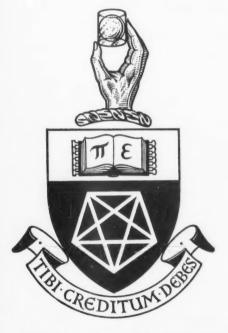
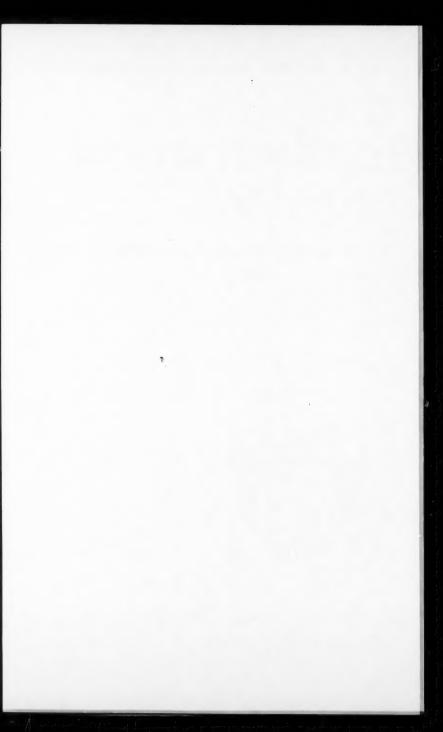
the mathematical gazette



Index to Volume 64: Numbers 427–430

1980



THE

MATHEMATICAL GAZETTE

VOL. 64

MARCH 1980 TO DECEMBER 1980 Nos. 427-430

THE MATHEMATICAL ASSOCIATION

Index

to the

Mathematical Gazette

Vol. 64

No. Month Pages 427 March 1–76 428 June 77–148 429 October 149–226 430 December 227–306

Articles Correspondence
Notes Miscellaneous
Reviews

Articles

Author	TITLE	PAGE
M. D. Atkinson & W. F. Lunnon	Regular fault-free rectangles	99
A. A. Ball	A new definition of rounding	5
Derek Ball	Halving envelopes	166
Claudio Bernardi & Manuela Moscucci	Investigating some geometrical features of 4-space	90
Marion H. Bird	A new look at functions in modular arithmetic	78
Victor Bryant	Who reads the Gazette? (editorial)	77
J. P. Coleman	Divergence rules OK?	180
A. Fitzgerald	Take an A level question	1
Colin R. Fletcher	Rings of small order	9
Colin R. Fletcher	Limits of interest	227
L. W. Gates	Summing square roots	86
F. Gerrish	Reduction of a square matrix to triangular form	266
J. S. Griffith	Decomposition of functions. 2. Some approaches to the general problem	116
Gordon Haigh	A 'natural' approach to Pick's theorem	173
C. W. Kilmister	Zeno, Aristotle, Weyl and Shuard: two-and-a-half millenia of worries over number (<i>Presidential</i> address)	149
Denis Lawson	Super-Pascal	177
Patrick J. McCarthy	Decomposition of functions. 1. Functional <i>n</i> th roots of unity	107
T. P. McDonough	Two group isomorphisms and a little projective geometry	245
Douglas Quadling	A personal vote of thanks (editorial)	77
R. L. E. Schwarzenberger	Why calculus cannot be made easy	158

AUTHOR		TITLE	PAGE
Sidney H. Scott		of powers of natural numbers. 1. By coefficient ation	231
Ray C. Shiflett & Harris S. Shultz		expect a full set?	262
David Tall	I a a labor	and another through in Guitasimal missassanan	22
	wind	g at graphs through infinitesimal microscopes, lows and telescopes	
Jonathan Weitsman	A gene	ral test for divisibility by primes	255
J. B. Wilker		of powers of natural numbers. 2 by efficient peration!	239
Notes			
	N	March 64.1-64.5	
	J	une 64.6–64.11	
	(October 64.11-64.17	
	I	December 64.18-64.27	
AUTHOR	No.	TITLE	PAGE
Ali R. Amir-Moez &	64.16	Vectors and spherical trigonometry	193
Daniel S. Moak	04110	, to to the special state of t	
A. Brown	64.20	By-passing an awkward turning	273
Ian Bruce	64.7	A means generated iteration for cube roots	122
Frank Budden	64.17	Throwing non-cubical dice	196
F. J. Budden	64.22	A geometric interpretation of a log inequality	276
F. Chorlton	64.15	Some infinite integrals	190
J. E. Drummond	64.13	Finding factor using the 1 and 3 times tables	188
F. Gerrish	64.2	A useless formula?	52
Clive J. Grimstone	64.6	A product of cosines	120
C. R. Haines	64.10	A further note on polynomial graphs	125
John van der Hoek	64.19	The arithmetic and geometric means	271
Basil Landau	64.21	A parabola specially related to the exponential curve	274
Gilhert Laporte, Roch Ouellet & François Lefebyre	64.3	A paradox in elementary probability theory	53
Phil Locke	64.9	Gibbs' proof of the vector product distributive law	124
E. R. Love	64.4	Some logarithm inequalities	55
E. R. Love	64.5	Repaying a loan by instalments	57
R. McLaughlin	64.25	Sequences—some properties by matrix methods	281
T. E. Moore	64.27	Isomorphisms between groups of rational numbers	286
David Mountford	64.1	A matrix approach to the binomial theorem	49
Alan Ollis & Sam Griffiths	64.26	A final slice of pork	283
Walter Penney	64.12	Descriptive sequences	186
J. M. H. Peters	64.8	Estimating the speed of a passing vehicle	122
T. J. Randall & H. Sharples		A useful recurrence relation	279
Michael Rose & V. O. Chan et al.	64.23	The sequence 1,2,5,12,29	277

AUTHOR	No.	TITLE		PAG
S. Roy	64.14	What's the next Fibonaco	ci number?	189
E. T. W. Smyth	64.11	Simultaneous discovery a	and proof in	185
		mathematical induction		
R. J. Webster	64.18	A Problem of Fourier		270
E. E. Wright	64.11	Cook-book calculus		128
Correspondence				
Author		Торіс		PAGI
M. T. L. Bizley	No lon	iger in our prime		129
H. M. Funican		tions and all that		198
C. A. Glasbey		about pig		20
Geoffrey Howson & Keith Lloyd		cal correspondence contin	ued	20
A. R. G. MacDavitt	"Faste	er! Faster!"	3	5
Robin McLean		ical correspondence contin	ued	199
H. L. Porteous &		about pig		20
J. Porteous		F-0		
R. E. Scraton	A gian	t leap	!	20
G. N. Thwaites	-	ernative route to the expon	ential series	5
Miscellaneous Diploma in mathematics Gleanings far and near		;) 1979 , 54, 89, 106, 115, 121, 12	7, 136, 143, 148, 184,	148
Diploma in mathematics				
Diploma in mathematics Gleanings far and near		, 54, 89, 106, 115, 121, 12° 210, 211, 213, 221, 233,		
Diploma in mathematics Gleanings far and near Reviews		, 54, 89, 106, 115, 121, 12 ¹ 210, 211, 213, 221, 233, 267, 272, 280, 282, 294	238, 244, 254, 259,	209,
Diploma in mathematics Gleanings far and near Reviews Author	51, 52	,54, 89, 106, 115, 121, 12' 210, 211, 213, 221, 233, 267, 272, 280, 282, 294	238, 244, 254, 259, Reviewer	209, Pag
Diploma in mathematics Gleanings far and near Reviews AUTHOR R. E. Jason Abdelnoor	51, 52 A mathe	, 54, 89, 106, 115, 121, 12' 210, 211, 213, 221, 233, 267, 272, 280, 282, 294	238, 244, 254, 259, REVIEWER C. Parker	PAG 130
Diploma in mathematics Gleanings far and near Reviews AUTHOR R. E. Jason Abdelnoor Lars V. Ahlfors	A mathe	717LE matical dictionary analysis (3rd edn)	REVIEWER C. Parker Short notice	PAG 130 146
Diploma in mathematics Gleanings far and near Reviews AUTHOR R. E. Jason Abdelnoor Lars V. Ahlfors G. W. Allen & A. Hill	A mathe Complex Mathem	717LE ematical dictionary analysis (3rd edn) atics, second level	REVIEWER C. Parker Short notice Roy Hollands	PAG 130 146 292
Diploma in mathematics Gleanings far and near Reviews AUTHOR R. E. Jason Abdelnoor Lars V. Ahlfors G. W. Allen & A. Hill M. A. Armstrong	A mathe	717LE ematical dictionary analysis (3rd edn) atics, second level	REVIEWER C. Parker Short notice Roy Hollands Czes Kosniowski	PAG 130 146 292
Diploma in mathematics Gleanings far and near Reviews AUTHOR R. E. Jason Abdelnoor Lars V. Ahlfors G. W. Allen & A. Hill M. A. Armstrong N. S. Armstrong	A mathe Complex Mathem Basic to House n	717LE ematical dictionary ex analysis (3rd edn) atics, second level pology naths	REVIEWER C. Parker Short notice Roy Hollands Czes Kosniowski Short notice	PAG 130 144 292 289
Diploma in mathematics Gleanings far and near Reviews AUTHOR R. E. Jason Abdelnoor Lars V. Ahlfors G. W. Allen & A. Hill M. A. Armstrong N. S. Armstrong	A mather Complete Mathem Basic to House in The finit	x 54, 89, 106, 115, 121, 12 210, 211, 213, 221, 233, 267, 272, 280, 282, 294 TITLE ematical dictionary analysis (3rd edn) atics, second level pology	REVIEWER C. Parker Short notice Roy Hollands Czes Kosniowski	PAG 130 144 299 300
Reviews AUTHOR R. E. Jason Abdelnoor Lars V. Ahlfors G. W. Allen & A. Hill M. A. Armstrong N. S. Armstrong Michael Aschbacher	A mather Complex Mathem Basic to House n The finit classif	754, 89, 106, 115, 121, 12 210, 211, 213, 221, 233, 267, 272, 280, 282, 294 TITLE Ematical dictionary x analysis (3rd edn) atics, second level pology naths e simple groups and their	REVIEWER C. Parker Short notice Roy Hollands Czes Kosniowski Short notice	PAG 130 144 292 289 300 302
Reviews AUTHOR R. E. Jason Abdelnoor Lars V. Ahlfors G. W. Allen & A. Hill M. A. Armstrong N. S. Armstrong Michael Aschbacher Association of Teachers of Mathematics	A mather Complex Mathem Basic to House in The finitial classif Mathem	TITLE matical dictionary analysis (3rd edn) atics, second level pology naths e simple groups and their fication atics for sixth formers	REVIEWER C. Parker Short notice Roy Hollands Czes Kosniowski Short notice Ian D. Macdonald	PAG 130 144 29: 28: 300 30:
Diploma in mathematics Gleanings far and near Reviews AUTHOR R. E. Jason Abdelnoor Lars V. Ahlfors G. W. Allen & A. Hill M. A. Armstrong M. S. Armstrong Michael Aschbacher Association of Teachers of Mathematics Association of Teachers of Mathematics	A mathe Complex Mathem Basic to House n The finit classif Mathem	TITLE matical dictionary k analysis (3rd edn) atics, second level pology naths e simple groups and their fication atics for sixth formers mathematics in primary ls methods for engineers and	REVIEWER C. Parker Short notice Roy Hollands Czes Kosniowski Short notice Ian D. Macdonald C. C. Goldsmith Short notice	
Reviews AUTHOR R. E. Jason Abdelnoor Lars V. Ahlfors G. W. Allen & A. Hill M. A. Armstrong N. S. Armstrong Michael Aschbacher Association of Teachers of Mathematics Association of Teachers	A mathe Complex Mathem Basic to House n The finit classif Mathem Notes on schoo Matrix r scient	TITLE ematical dictionary x analysis (3rd edn) atics, second level pology naths e simple groups and their fication atics for sixth formers mathematics in primary ls methods for engineers and ists	REVIEWER C. Parker Short notice Roy Hollands Czes Kosniowski Short notice Ian D. Macdonald C. C. Goldsmith Short notice A. T. F. Nice Short notice	PAG 133 144 295 285 300 300 206

education

AUTHOR	TITLE	REVIEWER	PAGE
Alan Bell, Alan Wigley &		Richard Walker	130
David Rooke	Teacher's guide 1, 2		
	Number skills 1, 2		
	Spirit masters packs 1–10	14 E B	=0
Edward A. Bender	An introduction to mathematical modelling	M. E. Rayner	70
Patrick Billingsley	Probability and measure	L. E. Clarke	293
G. D. Blackwell & A. D. Ball	Mathematics for today	D. P. Roberts	131
David M. Bloom	Linear algebra and geometry	H. Martyn Cundy	220
B. Bollobás	Graph theory—an introductory course	E. Keith Lloyd	217
Ronald Bolt & Charles Reynolds	Mathematics to sixteen. Books 1-4	Aubrey Emerson	69
L. Bostock & S. Chandler	Pure mathematics 1 and 2	Martin Berry	288
D. F. Brailsford & A. N. Walker	Introductory Algol 68 programming	D. E. Conway	224
C. J. Brooks, I. C. Betteley & S. M. Loxston	Fundamentals of mathematics and statistics for students of chemistry and allied subjects	Norman Gowar	291
Michael Browne	Graded exercises in modern mathematics	Short notice	76
G. D. Buckwell & A. D. Ball	Mathematics for today (2nd edn)	Short notice	226
I. W. Busbridge & R. A. Rankin (eds)	Collected papers of G. H. Hardy. Volume 7	W. K. Hayman	68
Florian Cajori	A history of mathematics (3rd edn)	Short notice	306
Thomas Carnevale & Robert Shloming	Encounters with arithmetic	Short notice	76
Centre for Statistical Education	Statistical education and training for 16–19-year-olds	John Hersee	129
Arnold Buffum Chace	The Rhind mathematical papyrus	John A. McIntyre	207
C. Clarke	Elementary general relativity	P. T. Landsberg	216
L. H. Clarke	Addition pure maths (3rd edn)	Short notice	226
L. H. Clarke & F. G. J. Norton	Additional applied mathematics (2nd edn)	Short notice	145
Daniel I. A. Cohen	Basic techniques of combinatorial theory	David Singmaster	139
B. D. Craven	Mathematical programming and control theory	G. A. Garreau	224
Peter Duffett-Smith	Practical astronomy with your calculator	A. D. Wood	216
John R. Durbin	Modern algebra	H. C. Williams	222
R. Elvin, A. Ledsham & C. Oliver	Basic mathematics: revision and practice	Short notice	76
Daniel T. Finkbeiner	Introduction to matrices and linear	J. Asquith	73

AUTHOR	TITLE	Reviewer	PAGE
A. Francis	Advanced level statistics: an	Michael J. Duncan	212
	integrated course		
John Gillespie	Numbers at work	J. J. Judge	292
J. A. Glenn (ed)	Children learning geometry	Julia Matthews	63
R. L. Goodstein	Fundamental concepts of mathematics (2nd edn)	Short notice	147
Norman Gowar	An invitation to mathematics	Ian Darke	206
Malcolm Graham	Modern elementary mathematics (3rd edn)	Short notice	76
A. Greer	Business studies for BEC	Barbara Tyler	132
A. Greer	New comprehensive mathematics for O level	Short notice	147
A. Greer	CSE mathematics 1 The core course 2 The special topics	Short notice	147
A. Greer	Statistics for engineers	Quintin Des Clayes	136
H. Gupta	Selected topics in number theory	Susan Denham	295
Charles Robert Hadlock	Field theory and its classical problems	Colin R. Fletcher	140
S. F. Hancock	Mathematics for engineers (2nd edn)	F. Chorlton	133
G. H. Hardy & E. M. Wright	An introduction to the theory of numbers (5th edn)	Short notice	226
P. J. Hartley & A. Wynn- Evans	A structured introduction to numerical mathematics	D. W. Arthur	222
Arlene Hartman	The calculator game book for kids of all ages	Short notice	304
M. J. Herring	Trimaths—mathematics after school	M. D. Stern	296
I. N. Herstein & I. Kaplansky	Matters mathematical (2nd edn)	Johnston Anderson	61
Robert V. Hogg (ed)	Studies in statistics	Short notice	145
Roy Hollands & Howell Moses	Headway maths, Books 1-5 Teachers' Books 1-5	John Dunford	132
Ross Honsberger (ed)	Mathematical plums	Richard Walker	203
H. A. Horner	Mathematics for TEC level II; Mathematics for TEC level III (3rd edn)	Short notice	226
Herman R. Hyatt & Bernard Feldman	The handheld calculator: use and applications	David N. Bain	298
J. R. Irwin	Essentials of applied mathematics	C. A. Parrack	215
Cyril Isenberg	The science of soap films and soap bubbles	R. D. Nelson	71
M. K. Jain	Numerical solutions of differential equations	Short notice	305
A. J. Jones	Game theory: mathematical models of conflict	Paul Hudson	299

AUTHOR	TITLE	REVIEWER	PAGE
H. J. Keisler, S. Körner, W. A. J. Luxemberg &	Selected papers of Abraham Robinson	C. W. Kilmister	208
A. D. Young (eds)	 Model theory and algebra 		
	Nonstandard analysis and philosopy Aeronautics		
		t E Dist.	141
Paul J. Kelly & Max L. Weiss	Geometry and convexity: a study in mathematical methods	J. F. Rigby	141
George J. Kertz	The nature and application of mathematics	K. E. Selkirk	134
Serge Lang	Calculus of several variables (2nd edn)	Short notice	146
Loren C. Larsen	Algebra and trigonometry refresher for calculus students	Short notice	305
Rolf Lingenberg	Metric planes and metric vector spaces	R. P. Burn	302
Peter Linz	Theoretical numerical analysis: an introduction to advanced techniques	D. W. Arthur	143
Saunders MacLane & Garrett Birkhoff	Algebra (2nd edn)	Short notice	146
J. Malitz	Introduction to mathematical logic	J. V. Tucker	142
Kurt Maly & Allen R. Hanson	Fundamentals of the computing sciences	John Jaworski	75
Dick Martin (ed)	The science of decision making in business, industry, government and society: operational research. A guide to education and employment opportunities	B. D. Bunday	. 295
Mathematical Association	Topics in mathematics: ideas for the secondary classroom	G. R. Young	204
Mathematical Association of America		Short notice	146
Mathematics Applicable Group	Modelling with trigonometry	D. P. Roberts	70
Karl Menger	Selected papers in logic and foundations, didactics and economics	Geoffrey Howson	207
H. R. Mills	Positional astronomy and astro- navigation made easy	A. D. Wood	144
J. S. Milton & J. J. Corbe	Applied statistics with probability	Pamela Morris	214
Abe Mizrahi & Michael Sullivan	Finite mathematics with applications for business and social sciences (3rd edn)	Short notice	76
Abe Mizrahi & Michael Sullivan	Mathematics for business and social sciences: an applied approach (2nd edn)	Short notice	76

Author	TITLE	REVIEWER	PAGE
David S. Moore	Statistics: concepts and controversies	R. J. Wicks	135
George Morgan	A criterion-referenced measurement model with corrections for guessing and carelessness	John K. Backhouse	225
J. B. Morgan and K. S. Snell	Unified mathematics, book 4	Short notice	306
Lorraine Mottershead	Sources of mathematical discovery	Richard Walker	63
T. V. Naranaya	Lattice path combinatorics with statistical applications	B. D. Bunday	138
R. D. Nelson	The Penguin book of mathematical and statistical tables	Short notice	305
Katsumi Nomizu	Fundamentals of linear algebra (2nd edn)	Short notice	145
D. G. Northcott	Affine sets and affine groups	D. W. Sharpe	300
Open University	Fundamentals of statistical inference	John Orriss	137
S. G. Page	Mathematics: a second start	E. D. Tagg	207
C. F. Palmer	Quantitative aids for management decision making	P. B. Coaker	225
Russell V. Person	Essentials of mathematics (4th edn)	Short notice	305
Paul E. Pfeiffer	Concepts of probability theory (2nd edn)	L. E. Clarke	74
E. J. G. Pitman	Some basic theory for statistical inference	J. Bibby	138
A. M. Plews	Introductory statistics	L. V. Glickman	288
W. M. Priestly	Calculus: an historic approach	E. H. Lockwood	212
Ernest Robson & Jet Wimp (eds)	Against infinity: an anthology of contemporary mathematical poetry	Ann M. Crowther	206
Chris Rorres & Howard Anton	Applications of linear algebra (2nd edn)	Short notice	147
Murray Rosenblatt (ed)	Studies in probability theory	Short notice	145
Gian-Carlo Rota (ed)	Studies in combinatorics	D. Monk	73
Andrew Rothery	At home with your calculator	Short notice	304
S. L. Salas & Einar Hille	Calculus: one and several variables (3rd edn)	Norman Gowar	72
S. L. Salas & C. G. Salas	Precalculus (2nd edn)	Short notice	75
H. D. Saxton	Cross Maths 1 and 2	Short notice	304
Marvin Schlichting	Basic algebra	Short notice	305
Arlo W. Schurle	Topics in topology	H. B. Griffiths	217
Scottish Mathematics Panel	Right now, books 1–4 Get it right, books 1–13	K. S. Burton	290
A. J. Sherlock, E. M. Roebuck, T. R. W. Heneage & S. M. Beck	Pure mathematics	David Taylor	211

Author	TITLE	REVIEWER	PAGE
Helen B. Siner	Mathematics for decisions	Short notice	306
W. Allen Smith	Elementary numerical analysis	E. Brew	223
SMP	SMP Revised advanced	S. L. Parsonson	69
	mathematics. Book 3		
	Answers and hints for Book 3		
SMP	The School Mathematics Project:	D. R. Martin	210
DIVII.	SMP calculator series		
	Discover how to use		
	your electronic		
	calculator		
	Growth and decay:		
	financial and		
	other		
	applications		
	Sequences and		
	iterative processes		
	Calculator supplement to		
	Books X, Y, and Z		
	Calculator supplement		
	by topics		
	Teacher's guide for		
	the SMP		
	calculator series		
I A Steam (ad)		Inhu Daulin	60
L. A. Steen (ed)	Mathematics today: twelve informal essays	John Baylis	
	l Algebraic number theory	H. Halberstam	220
Ferenc Szidarovszky & Sidney Yakowitz	Principles and procedures of numerical analysis	D. W. Arthur	73
T. Szmidt &	Statistical teaching aids (2nd edn)	G. Lee	214
A. F. Bissell (ed)			
D. Tattersfield	Projects and demonstrations in astronomy	A. D. Wood	144
David A. Tawney (ed)	Learning through computers	Short notice	145
George B. Thomas Jr &	Calculus and analytical geometry	Short notice	146
Ross L. Finney	(5th edn)		
Colin J. Thompson	Mathematical statistical mechanics	Short notice	305
H. A. Thompson	Know your tables and basic	Short notice	147
	arithmetic Workbook		
	Handbook for parents and teachers	S	
John Todd	Basic numerical mathematics	T. J. Randall	297
	Volume 1, Numerical analysis		
	Volume 2, Numerical algebra		
R. Wait	The numerical solution of algebraic	John O. Hawthorn	144
	equations		
M. E. Wardle &	New mathematics: revision and	Short notice	76
C. J. Weeks	practice		
A. Weil	Number theory for beginners	Terence Jackson	219

Author	TITLE	REVIEWER	PAGE
Ruric E. Wheeler & Ed R. Wheeler	Mathematics: an everyday language	Alan Tammadge	62
Robert L. Wilson	Much ado about calculus	VWB	296
Kurt Bernado Wolf	Integral transforms in science and engineering	Ll. G. Chambers	133
Arthur Wouk	A course of applied functional analysis	M. Planitz	301

The editor wishes to thank Mr. Ernest Long most sincerely for compiling this index, and Gordon Eyres for other related duties.









